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CORE ACTIVITIES OF THE OFFICE OF TOXIC SUBSTANCES

(DRAFT PROGRAM PLAN)

JULY 1976

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF TOXIC SUBSTANCES
WASHINGTON, D.C. 20460

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16. ABSTRACT

This report sets forth the core activities of the Office of Toxic Substances and the Office's future program plan. It describes a variety of efforts to identify, characterize, and reduce environmental problems associated with toxic chemicals.

PRICES SUBJECT TO CHANGE

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(Draft Program Plan)

Prepared by the

OFFICE OF TOXIC SUBSTANCES

U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

July 1976

Preface

This draft report sets forth the current core activities and future program plan of the Office of Toxic Substances. Should the Toxic Substances Control Act be enacted, it is anticipated that a new set of activities would be added to this core program to implement the legislation.

Since the Office activities are but a small part of the much broader National effort directed to toxic chemicals, comments on the scope and direction of the activities would be welcome. Such comments would be particularly helpful if received by September 1976 but would also be welcome at any other time.

CORE ACTIVITIES OF THE OFFICE OF TOXIC SUBSTANCES

General

The activities of the Office are designed to assist in removing specific chemical hazards from the environment and reducing the probability of future chemical incidents harmful to man or ecological resources. This goal is accomplished through Office outputs directed to stimulating and improving appropriate regulatory approaches of EPA and other Federal, State, and local authorities and to securing voluntary redress by industry. The Office outputs are intended to help clarify the character and priority of the chemical agenda needing prompt attention and to develop specific remedies for preventing and correcting chemical problems. The outputs take the form of published in-house and contractor reports, statements by Office spokesmen, and advisory memoranda and related communications to EPA offices, other agencies, and industry. Appendix 1 identifies a number of the Office reports published during the past two years. These reports reflect many of the early outputs resulting from the expenditure of about $20 million in FY 1973-6.

There are more than 30,000 industrial chemicals and two million mixtures, formulations, and blends currently in commerce, with an estimated 1,000 additional chemicals reaching the marketplace each year. Thus, selectivity is the cornerstone of the Office's efforts. Not only must selectivity take into account the potential environmental hazards of the chemicals, the urgency of the problems, and the likelihood that Office efforts will help reduce the problems, but unnecessary duplication of efforts of other EPA offices, other agencies, and industry must be avoided. A second cornerstone is the need to consider the total impact on society of chemical activities (i.e., cost, risk, benefit) when dealing with a sector of industry that undergirds our standard of living, accounts for more than 10 percent of our GNP, and annually contributes $5 billion to our favorable balance of payments.

In addition to internal EPA coordination, membership on a variety of interagency committees concerned both with specific chemicals and with general problems related to health effects, monitoring, and information contributes to improved Government-wide approaches to toxic chemicals. More importantly, however, interagency agreements with NIOSH, NBS, and other agencies and a variety of informal contacts will continue to characterize an aggressive outreach program which has resulted in numerous requests for comments on regulatory approaches of other agencies. Appendix 2 identifies the principal interagency committee activities of the Office, and Appendix 3 sets forth some of the significant Office contributions to regulatory deliberations of other agencies. Internationally, contacts are maintained with the WHO, OECD, EC, and UNEP, and with Japan, Canada, and Sweden, the three countries with major toxic substances legislation. Principal international interests include progress toward consistency in approaches to testing and more cost-effective data exchange efforts.

Set forth below are the principal core activities planned for the Office during the next several years. Additional ad hoc tasks will

undoubtedly be assigned to take advantage of the unique multi-media chemical assessment talent assembled in the Office, as was the case in 1975 when a number of assignments were completed in support of the initial implementation activities under the Safe Drinking Water Act. In that case, Office products included two reports to Congress on carcinogens in drinking water, the initial study of the impact of pesticides and fertilizers on ground water, the procurement request for the NAS study of the health effects of drinking water contaminants, an action plan for investigating organic contaminants in drinking water, and compilations of the health effects of selected organic chemicals.

In addition, should the Toxic Substances Control Act be enacted, an important new tool for more effectively addressing chemical problems would be available. While most of the core activities would contribute to implementation of this legislation, additional activities would also be required as set forth in the separate discussion of the legislation.

The Office's program activities contribute to the much broader Governmental effort in the following three areas, recognizing that there is often overlap among these areas:

(a) Identification of problems associated with chemical activities as the result of

- -- Systemmatic screening of available information
- -- Monitoring, toxicological, and epidemiological screening programs
- -- Ad hoc environmental incidents, research findings, and allegations

(b) Characterization of the problems with particular attention to

- -- Health and ecological effects and environmental behavior
- -- Current and projected sources, environmental levels, and exposed population
- -- Substitutes, control technology, and related cost and economic factors
- -- Actions to date and actions underway to clarify and control the problems

(c) Development and stimulation of preventive and corrective approaches including consideration of

- -- Role of relevant authorities of EPA and other agencies
- -- Alternative approaches to voluntary or regulatory redress
- -- Environmental and economic impact of approaches
- -- Implementation of appropriate approach

Given the backlog of unattended known chemical problems and the many difficulties usually attendant to remedying problems after they are characterized, the bulk of the Office's in-house efforts will continue to be directed to the development and stimulation of preventive and corrective actions.

Identification of Problems Associated with Chemical Activities

The Early Warning Program of the Office is designed to prioritize and characterize in a preliminary fashion chemical problems deserving further attention. A continuing effort will improve techniques for (a) rapidly screening new chemicals being introduced into commerce, (b) screening the world of old chemicals to uncover previously neglected problems, and (c) prioritizing and assessing suspect chemicals. Near-term activities include development of a model for comparing projected and acceptable environmental loads of chemicals, testing the utility of known correlation patterns between chemical structures and biological activity as a means of predicting toxicity, evaluation of the Delphic approach to problem prediction, and prioritization of some of the chemicals on the NIOSH list of about 1500 suspected carcinogens. The Early Warning Program's efforts directed to emerging technologies are currently directed to flame retardant chemicals (e.g., prioritization of additives, clarification of testing needs, and assessments of speciality monomers) and the impact of the advent of synthetic fuels on the choice and properties of chemical feedstocks of the future. A major output of the Program's broad screening of the world of chemicals will be reviews of selected chemicals which are likely candidates for regulatory attention. Among the early products of the program have been pioneering reviews of the health effects and related considerations associated with hexachlorobenzene, ethylene dibromide, and direct exposure to fluorocarbons.

Complementing the Early Warning Program is the interest of the Office in field screening efforts to identify previously unsuspected chemical problems. EPA field and research offices have traditionally conducted a variety of ad hoc reconnaissance monitoring efforts. The Office will continue to limit its reconnaissance monitoring efforts to encouraging better integrated Agency-wide activities and to filling gap areas such as its current programs developed jointly with the EPA laboratory in Athens, Georgia, to conduct total chemical cross section analyses on ambient water and effluent pipe samples taken from 15 to 20 selected industrial areas. The Office will continue its leadership role within the Agency in validating and using toxicological screening methods (e.g. Ames test) in close coordination with other Offices and other agencies. The payoff of these toxicological efforts has already been illustrated by the discovery that tris 2,3(dibromopropyl) phosphate, a widely used flame retardant in children's pajamas, caused a positive response in the Ames system. With regard to reconnaissance epidemiology, the Office will undoubtedly be a minor contributor to an anticipated expansion of the Government-wide effort during the next several years.

Of interest to a number of other EPA offices and other agencies are studies directed to the correlation of health effects with types of industrial activities. Using data from the Center for Health Statistics and the Department of Commerce, statistical analyses of mortality patterns among the general population in relation to plant locations are underway. If successful, the results should be particularly helpful in prioritizing

the types of industrial dischargers of toxic chemicals for regulatory attention under several authorities.

Characterization of the Problems

The Office will continue to strengthen its rapid-response capabilities to clarify the multimedia environmental problems associated with "crisis" chemicals of urgent concern to the Agency. At any given time, the Office will be directing its efforts to about ten such chemicals of immediate interest to a number of Agency offices.

The most ambitious effort to date has been a total assessment of the problems associated with polychlorinated biphenyls. Many EPA offices, other Federal and state agencies, and a broad sector of industry have been directly involved in these activities. The Office's principal contributions, in addition to its coordination role, will continue to be programs directed to source assessments, acquisition and compilation of monitoring data, economic analyses, and assessments of the impact of specific regulatory approaches, including the availability and environmental acceptability of replacement fluids. Other "crisis" chemicals that will command significant Office resources are arsenic and asbestos, and particularly epidemiological, monitoring, material flow, and economic studies concerning these substances. Office coordination and investigatory efforts directed to these and other "crisis" chemicals draw heavily on an array of on-call contractor resources, including toxicological laboratory capability and sampling and analysis teams, to supplement available EPA in-house resources. Close coordination of all field activities with the Regional Offices, and through them with State and local authorities, is clearly essential. Indeed, the contractor resources of the Office are deployed only when the resources of other organizations are not available on a timely basis.

In addition to the characterization of "crisis" chemicals, the Office prepares in-depth characterizations of other selected multi-media chemicals of long standing concern. These analyses, which draw heavily on existing reports such as the STAR reports when available, document the need for, character of, and likely impact resulting from regulatory measures beyond those currently in place. The emphasis is on careful assessment of all aspects of the desirability and feasibility of limitations on the manufacture, use, distribution, or disposal of these chemicals. However, recommendations concerning the need for EPA or other agencies to consider other types of limitations are also developed. Among the chemicals currently under study are mercury, cadmium, lead, trichloroethylene, methyl chloroform, acrylamides, aryl phosphates, and organo-tins. This analytical effort includes four steps: hazard assessment, development of regulatory alternatives, assessments of the environmental and economic impact of one or more of the alternatives, and development of a White Paper (as described below) setting forth the proposed approach.

Integral to the in-depth characterizations are the monitoring and information support programs of the Office. These efforts provide essential information, including generation of new data to fill significant

gaps concerning production levels and trends and the known and projected exposure levels. Production and use data come from reports prepared by the International Trade Commission, Bureau of Census, Bureau of Mines, SRI, Dun and Bradstreet, and several other organizations. Monitoring data are drawn from EPA offices (e.g., stack and ambient air, pipe and ambient water, drinking water, adipose tissue, mother's milk, soil, plant residues) and from the files and reports of other agencies (e.g., food residues from FDA, wildlife levels from Interior, animal contamination from USDA, ocean levels from NOAA, and workplace levels from OSHA and NIOSH). Occasionally, data from the states, cities, and industry are helpful. Specialized Office monitoring programs are then used to fill the gaps with the newly acquired data tailored to the specific types of regulatory decisions at hand.

Development and Stimulation of Preventive and Corrective Approaches

The continuing unanticipated emergence of "crisis" chemicals needing urgent attention by a number of EPA offices as well as other agencies has prompted the intensification of intra-agency coordination under the leadership of the Office. These coordinating activities are designed to alert the Agency to major chemical problems of near-term concern and to stimulate preventive and remedial actions. The activities are closely linked to the Office's program activities directed to "crisis" chemicals, and indeed in the absence of such program support, the Office would provide little more than an information exchange forum.

The criteria for selecting chemicals for broad intra-agency attention include (a) the inadequacy of existing EPA mechanisms for addressing the chemical, (b) the magnitude of the potential environmental problem, (c) the degree of public concern, and (d) the likelihood that EPA actions can reduce the problem. The general approach is (a) selection of the chemicals for attention, following intensive internal and external consultations, (b) characterization of the associated environmental problems, (c) inventory of the relevant on-going activities, (d) identification of the key program gaps, and (e) gaining of commitments to fill the gaps, including initiation of the regulatory process when appropriate. Written outputs for each chemical include a two-page summary characterization of the chemical and its effects plus references, a catalogue of on-going activities, and a plan for additional activities. The initial 14 chemicals that have been selected are: arsenic, asbestos, benzene, benzidine, cadmium, ethylene dibromide, hexachlorobenzene, hydrogen sulfide, mercury, platinum, PNA's, trichloroethylene, tris 2-3(dibromopropyl) phosphate, and vinylidene chloride. Second generation chemicals will include polybrominated biphenyls, bis(chloromethyl) ether, hexachlorobutadiene, lead, and others.

Considerable Office effort is also devoted to supporting development of regulatory approaches for these chemicals when the regulatory process is initiated, e.g., air standard for asbestos, effluent standards for benzidine and PCBs, and pesticide actions on mercury. In some cases,

Office contractors with a rapid on-line response capability prepare special studies at the request of the offices with lead responsibility for specific regulations. In other instances on-going contractor efforts are oriented to be of maximum utility in support of regulatory interests.

Consistency in regulatory approaches directed to the same chemicals is a major concern of the Office. Through participation in EPA Work Groups on such topics as sludge disposal, toxic effluent standards, hazardous air pollutants, drinking water standards, and pesticide registration guidelines, the Office will continue to bring to bear a multimedia perspective and an awareness of Government-wide activities to specific EPA regulations. Also, the expertise of the Office will continue to play an important role in supporting development of regulatory approaches by helping to insure the technical soundness of selected regulations and by defending them during the public review process. For example, the Office did much of the preliminary work and provided Agency experts during the hearings concerning the original benzidine toxic effluent standard and the recent air standard for vinyl chloride.

A new dimension of the Office's activities is the preparation of White Papers for obtaining early Agency decisions as to the need for and character of regulatory activities directed to major multimedia chemicals of concern. If regulatory action appears in order, the policy-oriented White Paper will provide a summary rationale and identify the supporting documentation needed for initiating the regulatory process. If regulation is not in order, the White Paper will explain to the public the basis for a negative decision. Four to six papers will be prepared annually.

Tracking of on-going efforts by EPA and other organizations directed to toxic chemicals keeps the Agency apprised of the multiplicity of closely related activities. The Office periodically compiles and distributes formal and informal reports summarizing the activities of EPA and other organizations directed to a variety of chemicals. The formal reports prepared and widely distributed during the past two years are Activities of Federal Agencies Concerning Selected High Volume Chemicals and Summary Tabulation of Selected EPA Activities Concerning Toxic Chemicals. Similar catalogues of regulatory and related activities will be prepared on a regular basis.

With regard to an improved legislative basis for controlling toxic chemicals, enactment of toxic substances control legislation will continue to be a near-term goal. The Office will continue to take the lead in developing draft legislation which the Administration supports and in preparing EPA Congressional testimony. In addition, expanded efforts will be directed to improving the environmental rationale for the legislation and, to the extent possible, assessing its likely economic impact.

The number of industrial chemicals that are potentially harmful if not properly controlled is so vast that the regulatory process will not be able to address many of the potential problems. Thus, an essential complement to the Office's efforts directed to better regulations is a major program thrust for stimulating industrial stewardship as a means

of reaching unregulated chemicals. Initial efforts directed primarily to about 30 of the larger chemical companies and to a dozen of the major trade associations are now being broadened to encompass more medium and small companies, to consider the special aspects of multinational companies, and to reach out to a larger network of specialized trade organizations and professional societies. The Office's activities include formal and informal presentations and discussions (a) at meetings under the aegis of trade associations and other organizations involving a number of companies, and (b) during carefully planned visits with key management and technical personnel, together with tours of R&D and manufacturing facilities, at individual companies. Also, provision of industry with technical reports and guidance concerning environmental assessments has been important. Most recently, for example, in response to industry requests an FR notice was published concerning the environmental acceptability of two proposed replacement fluids for PCBs. Earlier, as a direct result of the activities of the Vinyl Chloride Task Force, chaired by the Office, and parallel efforts by other agencies, industry took steps to significantly reduce environmental discharges of this chemical well before regulations were in place.

Interactions with industry have been directed to specific chemical problems (e.g., vinyl chloride, PCBs, benzidine, asbestos), to specific aspects of the Toxic Substances Control Act, and to more general environmental stewardship concerns. Without exception, the reception by industry has been quite good and at a very high level. While the impact of these efforts is difficult to measure, studies are in progress which attempt to document the current level of environmental stewardship within the chemical industry as an initial baseline for assessing progress in the future.

General environmental concerns within a company should include (a) one or more strong voices on the Board of Directors and in the operational chains of command -- voices that raise the proper questions concerning the health and environmental aspects of specific chemical activities at the time investment and related decisions are made, and (b) capabilities to assess the likely impact of specific chemicals on man and the environment. In considering the steps that companies have or might take beyond those actions required by Federal, State, or local regulations, the following areas are of particular interest: systemmatic reviews of the hazards associated with each chemical handled by the company; systemmatic procedures for assessing the environmental acceptability of new chemicals; monitoring at the fenceline, at the end of the pipe, and in the solid waste to determine the identity and levels of all chemicals being discharged into the environment; a system for insuring that all chemicals leaving the plant have appropriate warning labels concerning hazards, handling, and disposal; epidemiological investigations of the work force and, when appropriate, of neighborhood residents; toxicological and ecological testing of industrial chemicals to clarify uncertainties; and warnings and assistance to customers concerning environmental aspects of products. Also of interest are the willingness of the company to abandon products which pose a threat, the readiness to share information on adverse effects with the Government and with the public, the support of the

research efforts of trade associations, and the concern for the environmental stewardship of small suppliers and customers.

An area of special expertise of the Office is encouragement of improved industrial testing of chemicals. The Office will continue to document the need for expanded industrial testing of certain characteristics of specific types of chemicals of concern. Of immediate interest is the need on a selective basis to determine the environmental fate of halogenated hydrocarbons and to improve the characterizations of the health effects of suspected carcinogens. Concurrently, Office contractors are evaluating the reliability and feasibility of several types of test methods for possible adoption by industry, including bioaccumulation tests, aquatic teratology assays for organic chemicals, and skin painting approaches for carcinogens. In response to requests from industry, the Office has provided advice on testing of several types of detergent builders, dyes, flame retardants, and silicone oils. Recognizing the importance of consistency between the Agency's approach to pesticides and to industrial chemicals, the Office will continue to be a significant contributor to the development and refinement of pesticide registration guidelines and to the program to insure quality control of laboratory test data on pesticides.

REPORTS OF THE OFFICE OF TOXIC SUBSTANCES

(In-House Reports in italics Contract Reports in regular type)

(NTIS Reference Numbers Given)

I. Identification of Problems Associated with Chemical Activities

Environmental Hazard Assessment Report: Chlorinated Naphthalenes. PB-248-834

Environmental Hazard Assessment Report: Higher Benzene Polycarboxylates. PB-248-835

An Ordering of the NIOSH Suspected Carcinogens List Based Only on Data Contained in the List. PB-251-851

Biological Effects and Environmental Aspects of 1,3-Butadiene. NTIS number pending.

Chemical Technology and Economics in Environmental Perspectives: Removal of Boron from Wastewater. NTIS number pending.

Chemicals Which Have Been Tested for Neurotoxic Effects. NTIS number pending.

Current Awareness of Toxic Substances: Part I. PB-250-074

Current Awareness of Toxic Substances: Part II. PB-250-075

Environmental Aspects of Chemicals Used in Printing Operations. PB-251-406

Environmental Aspects of Chemical Use in Rubber Processing Operations. PB-244-172

Environmental Aspects of Chemical Use in Well-Drilling Operations. PB-246-947

Identification Systems for Selecting Chemicals or Chemical Classes as Candidates for Evaluation. PB-238-196

Investigation of Selected Potential Environmental Contaminants: Chlorinated Paraffins. PB-248-634

Investigation of Selected Potential Environmental Contaminants: Haloethers. PB-246-359

Investigation of Selected Potential Environmental Contaminants: Mercaptobenzothiazoles. NTIS number pending.

Investigation of Selected Potential Environmental Contaminants: Ketonic Solvents. PB-252-970

Literature Study of Selected Potential Environmental Contaminants: Antimony and Its Compounds. PB-251-438

Literature Study of Selected Potential Environmental Contaminants: Titanium Dioxide. PB-242-293

Manufacture and Use of Selected Alkyltin Compounds. Task I. PB-251-678

Manufacture and Use of Selected Aryl and Alkyl Aryl Phosphate Esters. Task I. PB-251-678

Manufacture and Use of Selected Inorganic Cyanides. PB-251-820

Papers of a Seminar on Early Warning Systems for Toxic Substances. PB-244-412

Preliminary Environmental Hazard Assessment of Chlorinated Naphthalenes, Silicones, Fluorocarbons, Benzenepolycarboxylates, and Chlorophenols. PB-238-074

Preliminary Investigation of Effects on the Environment of Boron. PB-245-984

Preliminary Investigation of Effects on the Environment of Indium. PB-245-985

Preliminary Investigation of Effects on the Environment of Nickel. PB-245-986

Preliminary Investigation of Effects on the Environment of Tin. PB-245-988

Preliminary Investigation of Effects on the Environment of Selenium. PB-245-987

Preliminary Investigation of Effects on the Environment of Vanadium. PB-245-989

Preliminary Study of Selected Potential Environmental Contaminants: Optical Brighteners, Methyl Chloroform, Trichloroethylene, Tetrachloroethylene, Ion Exchange Resins. PB-243-910

A Review of Concentration Techniques for Trace Chemicals in the Environment. PB-247-969

Review of the Environmental Fate of Selected Chemicals: Benzidine, 3,3'-Dichlorobenzidine, Ethylenimine, 1-Napthylamine, B-Propiolactone, Bis(chloromethyl)ether, 4'4-Methylenebis (2-Chloroniline). PB-238-908

Review of the Environmental Fate of Selected Chemicals. Task II: Polynuclear Aromatic Hydrocarbons. PB-250-948

A Study of Flame Retardants for Textiles. PB-251-441

Structure-Activity Correlation Bibliography. PB-240-658

II. Characterization of the Problems

Asbestos: A Review of Selected Literature Through 1973 Relating to Environmental Exposure and Health Effects. NTIS number pending.

Preliminary Assessment of the Environmental Problems Associated with Vinyl Chloride and Polyvinyl Chloride. PB-239-110

Review of Selected Literature on Ethylene Dibromide. NTIS number pending.

Summary Characterizations of Selected Chemicals of Near-Term Interest. NTIS number pending.

Epidemiology Studies: Cancer Mortality Near an Arsenical Pesticide Plant in Baltimore. Phase I Pilot Study. NTIS number pending.

Technical and Microeconomic Analysis: Arsenic and Its Compounds. NTIS number pending.

Asbestos in the Drinking Water of the Ten Regional Cities. Part I. PB-251-620

Asbestos in the Water of 17 Cities and in the Surface Waters of Seven Natural Sites. Part II. NTIS number pending.

Benzene: Environmental Sources of Contamination, Ambient Levels, and Fate. PB-244-139

Technical and Microeconomic Analysis of Cadmium and its Compounds. PB-244-625

Compilation of State Data for Eight Selected Toxic Substances: Arsenic, Beryllium, Cadmium, Chromium, Cyanide, Lead, Mercury, Polychlorinated Biphenyls. Volume I: Final Report. PB-248-660

Compilation of State Data for Eight Selected Toxic Substances. Volume II: Directory of State Toxic Substances Monitoring Agencies. PB-248-661

Compilation of State Data for Eight Selected Toxic Substances. Volume III: Annotated Bibliography of State Data and Information Sources. PB-248-662

Compilation of State Data for Eight Selected Toxic Substances. Volume V: Monitoring Program Capability Descriptor Tables. PB-248-664

Sampling and Analysis of Selected Toxic Substances: Ethylene Dibromide. PB-246-213

Chemical Technology and Economics in Environmental Perspectives. Task I: Technical Alternatives to Selected Chlorofluorocarbon Uses. PB-251-146

Environmental Hazard Assessment of One and Two Carbon Fluorocarbons. PB-246-419

Hexachlorobenzene and Hexachlorobutadiene Pollution from Chlorocarbon Processing. PB-243-641

An Ecological Study of Hexachlorobenzene. PB-252-651

Environmental Contamination from Hexachlorobenzene. PB-251-874

Sampling and Analysis of Hexachlorobenzene. NTIS number pending.

Ecological Study of Hexachlorobutadiene. PB-252-671

Sampling and Analysis of Hexachlorobutadiene. NTIS number pending.

Materials Balance and Technology Assessment of Mercury and Its Compounds on National and Regional Bases. PB-247-000

Pollution Potential of Polybrominated Biphenyls. PB-243-690

Summary of Office Requirements Resulting from Toxic Substances Control Act and a Preliminary Specification for a Data Management System. PB-238-088

Epidemiology Studies: Vinyl Chloride. PB-248-426

Sampling and Analysis of Selected Toxic Substances. Task III: Vinyl Chloride, Secondary Sources. PB-252-966

III. Development and Stimulation of Corrective and Preventive Approaches

Activities of Federal Agencies Concerning Selected High Volume Chemicals. PB-240-133

Analysis of the National Academy of Sciences' Report "Decision-Making for Regulating Chemicals in the Environment." NTIS number pending.

Draft Economic Impact Assessment for the Proposed Toxic Substances Control Act, S. 776. PB-242-826

Estimating Limiting Risk Levels from Orally Ingested DDT and Dieldrin, Using Updated Version of Mantel-Bryan Procedure. PB-243-009

Framework for the Control of Toxic Substances (Compilation of Speeches). PB-243-459

Industry Views on PCBs. NTIS number pending.

Review of PCBs in the Environment. NTIS number pending.

Preliminary aSeesament of Suspected Carcinogens in Drinking Water. PB-244-415

Preliminary Assessment of Suspected Carcinogens in Drinking Water (Appendices). PB-244-416

Preliminary Assessment of Suspected Carcinogens in Drinking Water, December 1975 Report to Congress. PB-250-961

Selected Aspects of the Control of Toxic Substances (Compilation of Speeches). NTIS number pending.

Summary Tabulation of Selected EPA Activities Concerning Toxic Chemicals. PB-253-172

Decision-Making for Regulating Chemicals in the Environment. NAS, 1975.

Identification of Organic Compounds in Effluents from Industrial Sources -- Drinking Water. PB-241-641

Impact of Intensive Application of Pesticide and Fertilizers on Underground Water Recharge Areas Which May Contribute to Drinking Water Supplies. PB-251-181

Industry Survey of Test Methods of Potential Health Hazards. PB-239-840

Laboratory Test Methods to Assess the Effects of Chemicals on Terrestrial Animal Species. PB-241-505

PCBs in the U.S.: Industrial Uses and Environmental Distribution. Task I. PB-252-012

Assessment of Liquid Siloxanes (Silicones). PB-247-778

Assessment of Wastewater Management Treatment Technology and Associated Costs for Abatement of PCBs Concentrations in Industrial Effluents. Task II. PB-251-433

Development of a Study for Definition of PCBs Usage, Wastes, and Potential Substitution in the Investment Casting Industry. Task III. PB-251-842

National Conference on PCBs (November 1975). PB-253-248

Review and Evaluation of Available Techniques for Determining Persistence and Routes of Degradation of Chemical Substances in the Environment. PB-243-825

Test Methods for Assessing the Effects of Chemicals on Plants. PB-248-198

OFFICE REPRESENTATION ON INTERAGENCY COMMITTEES

Standing Committees

Toxicology Information Subcommittee (NLM)

Interagency Collaborative Group on Environmental Carcinogenesis (NCI)

Subcommittee on Environmental Mutagenesis (NIEHS)

Policy Board of National Center for Toxicological Research (FDA)

Advisory Group for Chemical Monograph Referral Center (CPSC)

Interagency Committee on Testing for Fire Safety (NBS)

Currently Active Ad Hoc Committees

Second Task Force on Environmental Health Research (NIEHS)

Task Force on Inadvertent Modification of the Stratosphere (CEQ/NSF)

Task Group on Chemicals in Tissues (EPA-OTS)

Advisory Group on Health and the Environment (Domestic Council)

Previous Ad Hoc Committees

Interagency Work Group on Vinyl Chloride (EPA-OTS)

Interagency Work Group on Toxic Substances Control Act (OMB)

Cancer Epidemiology Study Group (CEQ)

Panel to Select Organic Compounds Hazardous to the Environment (NSF)

Subcommittee on Extrapolation of Risk for Carcinogens and Mutagens (NIEHS)

Working Group on Mutagenicity Testing (NCI)

Working Group Priorities for Mutagenicity Testing (EPA-OTS)

Note: Chairmanship given in parenthesis.

EXAMPLES OF COMMUNICATIONS TO OTHER FEDERAL AGENCIES CONCERNING REGULATORY AND RELATED APPROACHES

Recommended to USDA and FDA Action Level for Hexachlorobenzene	June 1973
Recommended to AEC Against the Use of PCBs in Molding Process	Dec. 1973
Recommended to Federal Highway Administration Against the Use of Lead Chromate Paint on Roads	Dec. 1973
Advised OSHA on Environmental Aspects of Vinyl Chloride Standard for the Work Place	June 1974
Recommended to Navy Against the Use of PCBs as Plasticizer in Paint	Oct. 1974
Advised OSHA on Environmental Aspects of Arsenic Standard for the Work Place	Dec. 1974
Alerted CPSC to Positive "Ames Test" Results for Tris 2,3(dibromopropyl) phosphate	Oct. 1975
Requested GSA, DOD, NASA, ERDA, and VA to Curb PCB Discharges	Jan. 1976
Requested International Trade Commission to Retain Reporting and Analysis Program for Synthetic Organic Chemicals	Feb. 1976
Requested Bureau of Census to Include Data on Smoking Habits in 1980 Census	May 1976